

REMARKS

The Office Action mailed March 20, 2003 has been reviewed and carefully considered. Claims 14 to 36 are pending in this application, with claims 14 and 27 being the independent claims. Reconsideration of the above-identified application and in view of the following remarks is respectfully requested.

It is noted that the file does not contain a Patent Drawing Review by the Patent Office Draftsperson. It is requested that this Review be undertaken and a Review by the Draftsperson be issued in response to this Amendment.

In the Office Action mailed March 20, 2003, claims 14 to 34 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter not described in the specification. In particular, it was alleged that the specification did not disclose a calender nip having a length of "less than and not equal to 30 mm, as recited in independent claims 14 and 27. This rejection is not understood. The Specification as originally filed adequately discloses that the particular calender nip at issue can have any length up to 50 mm. See, for example, original claim 1, page 9 of the specification, line 22; original claim 9, page 11 of the specification, line 7; the specification, page 7, line 31 to page 8, line 6, and in particular, page 8, line 6. ("in establishing a disclosure, applicant may rely not only on the specification and drawings as filed but also the original claims if their content justifies it", MPEP §608.04). Thus, the specification as filed adequately supports a calender of any length less than 50 mm in length, which includes nip lengths of 45 mm, 40 mm, 35 mm, 30 mm, 25 mm, 20 mm, 15 mm, etc. And therefore the specification discloses any ranges within those nip lengths that are disclosed, including 10 to 20 mm, 20 to 45 mm, 1 to 10 mm, 15 to 35 mm, less than 20 mm, less than 25 mm, and of relevance here, less than 30 mm.

The fact that independent claims 14 and 27 select one particular range within the disclosed range does not render the selected range unsupported by the specification. If a specification disclosed that an element of a widget could be in the shape of a square, a circle, a triangle, or a hexagon, there would be no question that a claim reciting only a square and circle shape would be adequately supported by the specification.

For these reasons, applicants respectfully request that the new matter rejection under 35 U.S.C. § 112, first paragraph, be withdrawn.

Independent claims 14 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over PCT Patent Application No. WO 96/28609 ("Eriksson") in view of U.S. Patent No. 5,582,689

(“Van Haag”). In the Office Action (page 3), it is stated “Eriksson fails to recite that the calendering of the at least one coated surface of the base web is performed with a calender having a nip length of less than and not equal to 30 mm.” Thus, the Examiner admits that Eriksson does not disclose or suggest using a calender in such a way, having a nip length of less than and not equal to 30 mm. In fact, because Eriksson discloses that in such circumstances (calendering after coating) an “extended nip” should be used and that an “extended nip is considered to comprise nip lengths of 3 to 10 cm, such as 4 to 8 cm, e.g. 6 to 7 cm.” (page 3, lines 24 to 35), it is respectfully submitted that Eriksson teaches away from using any post-coating calendars with a shorter nip length. Eriksson provides no motivation to persons of ordinary skill in the art to use a calender nip length shorter than 3 cm.

The Examiner appears to contend that it would be obvious to use a shorter post-coating calender nip length because “the difference between the Eriksson nip length and the claimed nip length is minimal” and “the present invention does not indicate any unusual results obtained from using calendars of slightly shorter nip lengths” (Office Action, ¶4, page 3). The Examiner concludes that it is “obvious to use the calendars of Eriksson over the calendars of present invention” (Office Action, ¶4, page 3). However, this is irrelevant. The argument that one might prefer the prior art to the claimed invention is not the same as an argument that the claimed invention is obvious. It is submitted that the Examiner is employing an “obvious to try” standard of obviousness, which is improper.

Additionally, it is incorrect that the application does not disclose any unusual results. The present invention “is based on first calendaring ... in a long-nip calender, and after coating, in a calender having a short nip” (specification, page 4, lines 1-3). As stated in previously amended Claim 1, the first calendaring step (sometimes referred to as “precalendering”) is performed with “a nip length of at least 50 mm”, and the second calendaring step, after the coating step, is performed with “a nip length of less than and not equal to 30 mm”. The claimed invention is directed to *this combination of two steps*, a precalendering step with a nip of at least 50 mm, and a calendaring step, after coating, with a nip less than 30 mm. As stated in the specification, it is *this combination of two steps* which not only distinguishes the invention over the prior art in general, but also shows improved results over Eriksson in particular:

“When the web surface is smooth and sealed prior to the coating step, the amount of coating mix applied can be essentially reduced or, correspondingly, the printability of the end product can be improved, even to a level exceeding that

described in PCT Patent Publication No. WO 96/28609 [Eriksson] without losing the flexural strength or 'bulkiness' of the web." (Specification, page 7, lines 5-10)

Thus, the criticality of ranges in the present invention is not merely the nip length of the post-coating calendaring step or the nip length of the pre-coating calendaring step, but rather the nip lengths as recited in the combination of those two steps (i.e., the use of a **longer** nip for precalendering, then a **shorter** nip for calendaring after coating). As stated above, the printability is improved by this combination of steps. The Examiner, in focusing on the second step *alone*, and not the *combination* of steps, is missing the point of the invention. The question is not whether it is obvious to use a nip length of less than 30 mm, but whether it is obvious to use a nip length of greater than or equal to 50 mm for precalendering, and then to use a nip length of less than 30 mm for calendaring after coating. It is respectfully submitted that such a combination is not obvious in light of Eriksson.

Although Eriksson mentions that a precalendering step may be performed (see, e.g., page 5, lines 31-33), Eriksson teaches away from using such a step ("... **by deleting the conventionally used calendaring operation before the coating operation** and by performing a calendaring operation only after the coating operation ..., it was possible to obtain coated paperboard with reduced susceptibility to crack formation ... and with adequate or improved surface for printing and adequate or improved surface gloss ... and at the same time much increased stiffness" page 2, line 31 to page 3, line 6). Eriksson repeatedly states that the "characteristic feature" of the invention is the single calendaring step after coating (see, e.g., page 5, lines 4-6, 23-26, page 6, lines 6-9). Thus, Eriksson teaches away from having a precalendering step.

Furthermore, insofar as Eriksson discusses having a precalendering step, Eriksson neither teaches nor suggests a precalendering step with a longer nip length than a subsequent calendaring step, or, more specifically, a precalendering step with a nip length of at least 50 mm and a calendaring step of less than, but not equal to, 30 mm, as recited in applicants' independent claims 14 and 27.

At least because 1) the combination of ranges recited in the combination of precalendering and calendaring steps is critical; and/or 2) Eriksson teaches away from the combination of a precalendering step with a nip length of at least 50 mm and a calendaring step with a nip length of less than 30 mm, claims 14 and 27 are patentable.

For all of the foregoing reasons, applicants respectfully submit that independent claims 14 and 27 are patentable. Dependent claims 15 to 26 are patentable for the same reasons that independent claim 14 is patentable; dependent claims 28 to 34 are patentable for the same reasons that independent claim 27 is patentable.

Applicants respectfully submit that this application is in condition for allowance, and such action is respectfully requested.

Respectfully submitted,

COHEN, PONTANI, LIEBERMAN & PAVANE

By



Michael C. Stuart

Reg. No. 35,698

551 Fifth Avenue, Suite 1210

New York, New York 10176

(212) 687-2770

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